Long Beach Naval Complex
Long Beach, California

Engineering Field Division/Activity: SOUTHWESTDIV

Major Claimant: COMNAVSEASYSCOM/COMNAVFACENGCOM/CINCLANTFLT/BUMED

Size: 1,883 Acres

Funding to Date: $24,677,000

Estimated Funding to Complete: $123,862,000

Base Mission: Provided support and supplies for assigned surface craft and ships; drydocking; research and test work; housing; and hospital and clinical services

Contaminants: Chlorinated solvents, solvents, acid, blasting grit, paint, heavy metals, industrial wastewater, industrial liquid waste, asbestos, POLs, pesticides

Number of Sites:		Relative Risk Ranking of Sites:			
CERCLA:	23	High:	4	Not Evaluated:	8
RCRA Corrective Action:	0	Medium:	8	Response Complete:	0
RCRA UST:	2	Low:	5	Total Sites:	25
Total Sites:	25				

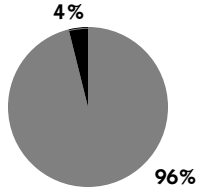
BRAC II

BRAC IV

EXECUTIVE SUMMARY

Long Beach Naval Complex includes Naval Shipyard (NSY) Long Beach, Naval Station (NS) Long Beach, Naval Station (NS) San Pedro and Naval Hospital (NAVHOSP) Long Beach. NS and NSY Long Beach are located on the south side of Terminal Island within the boundaries of the cities of Los Angeles and Long Beach. The NAVHOSP is located in the northeast corner of the City of Long Beach. NS San Pedro consists of three family housing areas and is located adjacent to the Defense Fuel Supply Center in San Pedro. The NS and NSY Long Beach complex has been an industrial facility for over fifty years. Typical operations that contributed to contaminated sites at NS Long Beach include: laundry and dry cleaning, steam plant operations, air compressor operations, boat working, wet paper destruction and paint bucket cleaning. Typical operations that contributed to contaminated sites at NSY Long Beach include: vehicle maintenance and repair, utility maintenance and operation, dip tanks, boiler repair and maintenance, vapor degreasing, machine shops, pipefitting, electrical shops, painting, abrasive blasting, weapons system shops, petroleum product and hazardous material storage. Typical operations that contributed to contaminated sites at NS San Pedro include: disposal of ships wastes, drilling muds and construction debris, fuel storage and fire fighter training. Operations at the hospital that contributed to contaminated sites on the complex are disposal of hospital wastes and storage of fuel. Current operations include pollution prevention technologies to prevent further contamination. Primary sites of concern are disposal pits into which all types of wastes were disposed of.

The Terminal Island complex is built on a manmade island constructed of hydraulic fill which is isolated hydrogeologically. Land use in the vicinity of the NS and NSY Long Beach is port-related, commercial, or industrial. There is no groundwater at the complex that is potable. The complex is bordered by the Los Angeles and Long Beach Harbors which are important nesting and feeding areas for many coastal migratory birds. Land use in the vicinity of the NS San Pedro facility is predominately residential, commercial and industrial. Groundwater beneath the facility is not used.



Current Status Of Sites

Studies Underway	24
Cleanups Underway	1
Response Complete	0
TOTALS	25

The NAVHOSP and NS Long Beach Technical Review Committee (TRC) was converted to a Remedial Action Board (RAB) in FY94. The NSY is covered by the same RAB. The RAB meets on a bimonthly basis. A Community Relations Plan (CRP) was completed and two information repositories were established in FY93. A RAB was formed for NS San Pedro in FY95 and meets quarterly. A CRP was completed in FY94. Information Repositories have been established at two locations.

Currently eight sites at NSY, eight at NS San Pedro and seven at NS Long Beach are in the study phase. All of these are CERCLA sites. At NS San Pedro, the Remedial Investigation/Feasibility Study (RI/FS) is underway at three sites. One site is awaiting funding to begin a Preliminary Assessment (PA). Four sites have completed Site Inspection (SIs) and are awaiting funds to begin cleanup. At the NSY, RI/FSs are underway at eight sites. At the NS Long Beach, RI/FSs are underway at seven sites. Three Interim Remedial Actions (IRAs) have been completed. Corrective measures are underway at the NS Underground Storage Tank (UST) site. During groundwater monitoring at the NAVHOSP UST site, contaminant levels were found to decrease so significantly, that regulatory agencies have agreed to no further action at the site.

In the future, RI/FSs will be completed at six sites in FY96 and 12 sites in FY97. Corrective Measures will be complete at one site in FY96. Five Records of Decision (RODs) are scheduled to be complete in FY97. A PA will be completed at one site in FY97.

The NS and NAVHOSP Long Beach were identified for closure in BRAC II. The NSY and NS San Pedro were identified for closure in BRAC IV. The NS Long Beach was closed 30 September 1994. NAVHOSP activities ceased 31 December 1993. The facility was officially closed 31 March 1994 and is now in caretaker status. A BRAC Cleanup Team (BCT) was formed and a BRAC Cleanup Plan (BCP) and Environmental Baseline Survey (EBS) were completed in FY94. Two Finding of Suitability to Transfer (FOSTs) were completed.

Site 7 (NS and NSY), Harbor Sediments, presents the biggest challenge for cleanup at the Naval Complex Long Beach. The initial estimate is $1.2 billion to complete cleanup of the site. Phase I and II of the RI/FS are being combined into a single phase to streamline the study process. Another critical issue is the designation of groundwater underlying the Terminal Island facility as Beneficial Use Water. This designation requires that groundwater be cleaned up to Maximum Contaminant Levels (MCLs). The facility is working with the Regional Water Quality Control Board to redesignate the groundwater or exempt it from that portion of the basin plan.

Long Beach Naval Complex
RELEVANT ISSUES

ENVIRONMENTAL RISK

HYDROGEOLOGY - NS and NSY Long Beach are bordered on the north by oil fields, on the west and south by the Los Angeles Harbor and on the east by oil production reinjection wells and the Long Beach Harbor. Most of the complex is built on hydraulic fill which varies in thickness, but is typically less than 200 feet. The Mole, upon which Sites 1-4 are located, is a large U-shaped breakwater constructed in 1944 which forms the West Basin of the Long Beach Harbor. Potential for contaminant migration off-base is low. Groundwater movement is influenced by tides, has low velocity, and is also brackish and unusable. Surface drainage is discharged through storm drains to the West Basin of the Long Beach Harbor.

The NS San Pedro facility is bounded on the north by a trailer park and residential area, to the west by residential and commercial (cemetery) property, to the south by residential property and to the east by a large industrial complex. At NS San Pedro, regional surface drainage flows via ravines and large culverts into Los Angeles Harbor. Prior to 1971, surface drainage was to Harbor Lake. After 1971, Harbor Lake Dam was constructed. A small percentage of the potable water used within a 4-mile radius of NS San Pedro comes from groundwater. Groundwater beneath NS San Pedro is not used for any municipal or industrial purposes.

NATURAL RESOURCES - The Terminal Island area is highly industrialized. There is little or no natural terrestrial habitat within the Naval Complex as it was predominately constructed on hydraulic fill. The NSY is mostly paved; the NS does include some landscaped areas between the buildings. All the trees and shrubs and grass have been planted since the 1940s. The harbor is an important nesting and feeding area for many coastal migratory birds. The black-crowned night-heron has established an extensive rookery in several trees on the NS. This bird is considered a sensitive migratory bird and is afforded protection under the Migratory Bird Treaty Act. The California brown pelican and least tern, both Federal endangered species, use the NS and surrounding waters as foraging and resting areas.

At the NAVHOSP, there are no rare, threatened, or endangered plant or animal species.

The NS San Pedro consists almost entirely of graded, previously cleared land. The developed areas on and around the sites are landscaped with lawns and non-native shrubs and trees. At one site there is a small wetland at the bottom of a ravine which is inhabited by the California Gnatcatcher, a threatened species. Another site is visited by the San Pedro Blue Butterfly which is endangered.

RISK - The DOD Relative Risk Ranking System was applied to sites at NS San Pedro, NSY and NS Long Beach. Two sites at NS Long Beach and two sites at NSY Long Beach were ranked as high relative risk. The high ranking was due to contaminated soil and groundwater. A Baseline Risk Assessment was completed for Sites 1-6 (NS) in May 1995. A Baseline Risk Assessment will be completed for Site 7 in December 1995. A Baseline Risk Assessment should be completed for the NSY sites in March 1996.

RESTORATION PROJECTS
Revegetation of the hillside at Site 11 took place in February 1994.

REGULATORY ISSUES

PARTNERING - A partnering agreement was developed at the BRAC Cleanup Plan (BCP) strategy camp, 16 November 1994. The BRAC Cleanup Team (BCT) executed this partnering agreement.

COMMUNITY INVOLVEMENT

RESTORATION ADVISORY BOARD - NS and NSY Long Beach formed a joint Technical Review Committee (TRC) in July 1992. The TRC met quarterly and included representatives from the installations, regulatory agencies and the community. The TRC was converted to a RAB in April 1994. The RAB meets at least once every other month. Originally the RAB started with 30 community members. Six members have resigned and now the RAB has 14 members. Members include representatives from the Ports of Los Angeles and Long Beach, a Homeowners Association, Natural Resources Committee, League of Women Voters, Earth Institute, and various other community representatives. The RAB has held four workshops to educate members.

A RAB was formed for NS San Pedro in FY95 and meets quarterly. The first RAB meeting was attended by several hundred angry people. Since then the RAB has gained widespread community support. The RAB is now composed of 20 community members and includes housewives, professionals and others.

COMMUNITY RELATIONS PLAN - A Community Relations Plan (CRP) was completed in August 1993 for NS Long Beach and NAVHOSP. Four Fact Sheets have been released. A public meeting was held in July 1993 to inform the local community of the proposed actions. Another meeting is planned for FY96 when the proposed cleanup plan is complete. The CRP will be updated to include NSY. A CRP for NS San Pedro was published in May 1994. A Fact Sheet was completed in July 1992.

INFORMATION REPOSITORY - Information Repositories for NS Long Beach and NAVHOSP were set up in FY93 at the NS library and the Long Beach Public Library. An Administrative Record was also established in FY93 and is on file at NS Long Beach. Information from the Administrative Record is contained in the information repositories. Information Repositories for NS San Pedro are located at San Pedro Public Library and Miraleste Branch of the Palos Verdes Library.

BASE REALIGNMENT AND CLOSURE

BRAC - In March 1992, NS and NAVHOSP Long Beach were identified in the Base Realignment and Closure Act of 1990 (BRAC II). NSY Long Beach and NS San Pedro were identified in BRAC IV.

BRAC CLEANUP TEAM - A BRAC Cleanup Team (BCT) was formed in November 1993 for NS Long Beach and NAVHOSP. The same BCT will cover NSY Long Beach and NS San Pedro which were identified in a later BRAC list. The BCT is composed of the BRAC Environmental Coordinator, Cal-EPA Department of Toxic Substances and Control (DTSC) representative, and an EPA representative. The BRAC Cleanup Plan Project Team consists of a variety of technical, operational, reuse and administrative specialists. Immediately after formation, the BCT and the BCP Project Team participated in a three day "strategy camp" to develop options for implementing the cleanup program at the installations. The BCT has also accelerated the cleanup process through combining the Phase I and II RI/FS activities; shortening document review time by holding discussion workshops; improving communications by participating in telephone conferences; and developing a partnering agreement. The BCT has also been available during field operations to make real time decisions.

DOCUMENTS - The first BRAC Cleanup Plan (BCP) was completed in March 1994. The second draft was published in March 1995. A third update is due March 1996. A revised final Environmental Baseline Survey (EBS) was completed in April 1994 for NS and NAVHOSP. Cal-EPA Department of Toxic Substances Control (DTSC) did not concur with the Community Environmental Response Facilitation Act (CERFA) clean acreage identified in the final EBS because they felt the groundwater was not fully investigated. The groundwater is currently being

Long Beach Naval Complex

addressed in the RI/FS. The EBS will be revised in FY96 to incorporate the NSY. EBSs will be completed for four areas at NS San Pedro by May 1996. In the NS and NAVHOSP EBS, the Environmental Condition of Property was assessed according the DOD and American Society for Testing and Materials (ASTM) guidelines and the results from the revised final EBS are shown in the chart below.

Environmental Conditions of Property Classification						
1	2	3	4	5	6	7
135 acres	0 acres	0 acres	35 acres	0 acres	197 acres	1 acre

LEASE/TRANSFER - The NS Savannah/Cabrillo housing was transferred in July 1994 to three federal agencies. A Finding of Suitability to Transfer (FOST) for Parcel B at NAVHOSP was completed in February 1995. Parcel B will revert back to the city in October 1995. A FOST for NAVHOSP Parcel A will be completed in FY96. Findings of Suitability to Lease (FOSLs) for NS will be completed in FY96.

REUSE - A Land Reuse Plan was completed in August 1993 for NS and NAVHOSP. For the NAVHOSP property, the City of Long Beach Naval Properties Reuse (NPR) Committee has proposed the development of a retail center. For the NS property, the proposed reuse is enlargement of the Long Beach and Los Angeles ports. The Reuse Plan will be revised in FY96 to incorporate the NSY.

FAST TRACK INITIATIVES - The following five DOD initiatives are being implemented: (1) identification of clean parcels, (2) partnering, (3) overlapping phases of the cleanup process, (4) improved contract procedures and (5) interfacing with the Reuse Plan.

HISTORICAL PROGRESS

FY83

Sites 1-7 (NS) and 7-12 (NSY) - An Initial Assessment Study (IAS), equivalent to a Preliminary Assessment (PA), was completed in August 1983 for Naval Complex Long Beach. Twelve sites were identified: Sites 1-7 at NS and Sites 7-12 at NSY. Site 7 was split into NS Harbor Sediments and NSY Harbor Sediments. The IAS recommended no further action at Sites 1-12. EPA Region IX reviewed the IAS and indicated a need for additional work; therefore, all sites (Sites 1-12) were recommended for a Site Inspection (SI).

FY89

Sites 1-7 (NS), 7-13 (NSY) - A RCRA Facility Assessment (RFA) was completed as part of a Part B permit application. Thirteen potential solid waste management units (SWMUs) were identified. The first 12 SWMUs were the same as Installation Restoration Program (IRP) Sites 1-12 identified in the IAS. One additional site was identified on the NSY, the Tank Farm near Bldg. 303 (Site 13). The RCRA Facility Investigation (RFI) requirements are being covered as part the Remedial Investigation/ Feasibility Study (RI/FS).

FY90

Sites 2, 5, 11, 12, 31, 32 (NS San Pedro) - A PA was completed at six sites.

FY92

NAVHOSP - A PA, completed in June 1992, identified no potentially contaminated sites at NAVHOSP Long Beach; therefore, no further action was recommended.
Site 6 (NS San Pedro) - A PA was completed in April.

FY93

Sites 1-7 (NS) and 7-13 (NSY) - A Site Inspection (SI) completed in November 1992 identified the following potential contaminants in the soil at the corresponding sites: Asbestos, blasting grit, refuse without hazardous materials and scrap metal at NS Site 1; acid, petroleum products, paint and solvents at NS Site 2; petroleum product sludge, petroleum products, refuse without hazardous waste, industrial liquids and industrial sludges at NS Site 3; blasting grit, asbestos, petroleum products and refuse at NS Site 4; construction debris, refuse without hazardous waste at NS Site 5; blasting grit, refuse without hazardous waste, unknown wastes and old boats at NS Site 6; and industrial liquids, low-level radiation, the chemical additive PCB, petroleum products and acid at NSY Site 7; chlorinated solvents at NSY Site 8; petroleum products and solvents at NSY Site 9; acids, solvents and others at NSY Site 10; blasting grit and heavy metals at NSY Site 11; blasting grit, paint, petroleum products and solvents at NSY Site 12; and petroleum products, acids and heavy metals at NSY Site 13. The report recommended further investigation at Sites 1-13. The SI further recommended that public access to NS Site 6 be limited.

FY94

Site 6 (NSY) - A PA was completed for which identified this site as a result of a real estate transfer.
Site 11 (NSY) - An Interim Remedial Action (IRA) which involved a protective covering to prevent off-site migration and reduce potential long-term risks from NSY Site 11 was completed in October 1993. An IRA which involved relocation of sandblast grit, placement of a Gunite cap and revegetation of the hillside was completed in February 1994.
UST 1 (NAVHOSP) - A removal action to remove tanks and contaminated soil was completed.
Sites 2, 5, 6, 11, 12, 31 and 32 (NS San Pedro) - SI completed.

PROGRESS DURING FISCAL YEAR 1995

FY95

Sites 1-6 (NS) - An RI was completed.
Site 12 (NSY) - An IRA was completed which involved asphalting of a dirt parking lot.

UST 1 (NAVHOSP) - An Initial Site Characterization to determine the extent of soil and groundwater contamination was completed. Groundwater monitoring required by the Regional Water Quality Control Board was completed in July 1995. No further action is required.

Long Beach Naval Complex
PLANS FOR FISCAL YEARS 1996 AND 1997

FY96

Sites 7 (NS), 6, 7 (NSY) and 6, 31, 32 (NS San Pedro) - RI/FSs will be completed.
Sites 1-6 (NS) - FSs will be completed.
UST 1 (NS) - A removal action will be completed at the NEX Gas Station UST site to minimize free product contamination. Vapor extraction and groundwater treatment operations will be constructed and initiated at the site.

FY97

Sites 1-5 (NS) - RODs will be completed by December 1996.
Sites 8-13 (NSY) - RI/FSs will be completed.
Site 7 (NS San Pedro) - A PA will be completed.

PROGRESS AND PLANS

CERCLA	FY94 and before	FY95	FY96	FY97	FY98	FY99	FY00	FY01 and after
PA	22			1				
SI	21		1					
RI/FS			6	12				
RD				6		7		
RA					10	4	1	7
IRA	1(2)	1(1)						
RC				1	10	4	1	7
Cumulative Response Complete				47%	48%	65%	70%	100%

UST	FY94 and before	FY95	FY96	FY97	FY98	FY99	FY00	FY01 and after
ISC			1					
INV								
CAP			1					
DES				1				
IMP			1		1			
IRA								
RC			1		1			
Cumulative Response Complete			50%		100%			